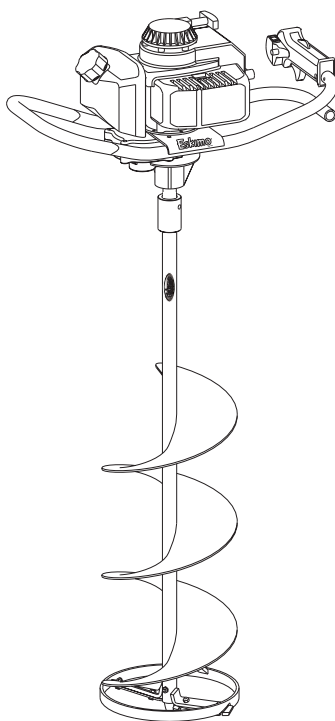




# Power Ice Auger Operator's Manual

**Shark<sup>TM</sup>**



## Models

9403S

9403S8

9403SQ8

9403SQ9

9403S10

OM9403S-04

Rev. 08/03

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# REGISTRATION AND WARRANTY



## THANK YOU . . .

for purchasing an Eskimo Ice Auger from Ardisam, Inc. With proper care, your auger will provide many years of service. Please take the time to read this manual carefully to learn how to correctly operate and maintain your auger. Congratulations on your investment in quality.

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## REGISTRATION

Your auger has a serial number decal located on the opposite side of engine gas tank. Engine serial number is located directly above spark plug. Write these numbers and the model number in the space provided. You will need these numbers if you order parts. Fill out and mail the registration card located in your parts packet. Warranty is valid only if your completed registration card is received by Ardisam, Inc., at time of purchase.

Model Number \_\_\_\_\_

Serial Number \_\_\_\_\_

Engine Serial Number \_\_\_\_\_

Date of Purchase \_\_\_\_\_

Place of Purchase \_\_\_\_\_

## WARRANTY

### Two Year Limited Warranty

The Ardisam, Inc., Manufacturing Company warrants this Ice Auger to be free from defects in material or workmanship. Conditions of this warranty include:

#### What is covered under warranty:

Ardisam, Inc. will repair or replace any part defective in workmanship or material within two years after delivery of the auger to the original purchaser.

#### What is not covered under warranty:

This warranty applies only to products which have not been repaired or altered outside our factory. It covers only defects resulting from normal use, and does not cover defects arising from misuse, alteration, negligence, commercial use, or accident. This warranty applies only to the original purchaser, and is not transferrable.

#### How to obtain service:

Return the product to us at the address below with transportation charges prepaid.

*This warranty supersedes all other warranties either expressed or implied and all other obligations or liabilities on our part. Ardisam, Inc., does not assume, and does not authorize any other person to assume for us, any liability in connection with the sale of our products. This guarantee is void unless warranty card is properly filled out and returned to Ardisam, Inc., Cumberland, Wisconsin, at time of purchase.*



### ARDISAM, INC.

1360 1st Avenue; P.O. Box 666  
Cumberland, Wisconsin 54829  
(715) 822-2415 Fax (715) 822-4180

**1-800-3456-007**

[www.ardisam.com](http://www.ardisam.com)

### CALIFORNIA PROPOSITION 65 WARNING

Engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.



## OWNER'S RESPONSIBILITY

Accurate assembly and safe and effective use of the auger is the owner's responsibility.

1. Read and follow all safety instructions.
2. Carefully follow all assembly instructions.
3. Maintain the auger according to directions and schedule included.
4. Ensure that anyone who uses the auger is familiar with all controls and safety precautions.

## CAUTIONS AND IMPORTANT NOTES

Two symbols which draw attention to information of special interest appear throughout this manual. These comments range in importance from helpful hints to warnings about risk of personal injury. Please take the time to read and understand them.



### CAUTION

Indicates a situation which may cause personal injury or damage to the auger or property.



Provides helpful information for proper assembly, operation, or maintenance of your auger.

## IMPORTANT SAFETY PRECAUTIONS

**Please read this section carefully.** Operate the auger according to the safety instructions and recommendations outlined here and inserted throughout the text. Make sure anyone who uses the auger has read the instructions and is familiar with the controls.



**This symbol points out important safety instructions which if not followed could endanger your personal safety. Read and follow all instructions in this manual and any others provided with this equipment.**

1. The ice blade is very sharp. Use extreme caution when drilling a hole, replacing the blade or blade guard.
2. Do not carry the auger powerhead between holes with the engine running.
3. The auger should not rotate when the engine is idling. If it does rotate when engine is idling, contact Ardisam, Inc. for instructions.
4. Always keep hands and feet clear of rotating auger.
5. Do not wear loose clothing while operating the power auger.
6. Do not allow children to operate this power auger. Do not allow adults to operate the auger without proper instruction.
7. Do not operate any power equipment under the influence of alcohol or drugs.
8. Keep all screws, nuts and bolts tight.
9. Engine should be shut off before any repairs are attempted.



## OPERATION

### CAUTION

Please do not start your auger until you have read this section and the section titled Safety. If you have read these, follow the steps below to start your auger. Always perform this pre-start checklist before starting the engine.

1. **BE SURE TO USE PROPER GAS/OIL MIXTURE.**
2. The clutch will transfer maximum power after about two hours of normal operation. During this break-in period clutch slippage may occur. The clutch should be kept free of oil or other moisture for efficient operation.
3. Dig holes without placing excessive body weight on the unit. The auger operates most efficiently with a shaving action caused by the weight of the unit itself.
4. Never run engine indoors. Exhaust fumes are deadly.
5. Do not use an ice auger in earth.
6. The ice auger blade protector should be attached to the auger head when not in use. This will protect the cutting edge of the ice auger blade.
7. This ice auger is not recommended for redrilling old ice holes.

## FUEL MIXTURE

### CAUTION

Never add gas when engine is running or hot from operation. Never fill the tank indoors.

### IMPORTANT

This engine uses a gas/oil mixture. **DO NOT RUN ENGINE ON STRAIGHT GAS ONLY. ENGINE DAMAGE WILL RESULT!**

1. Mix clean, fresh, lead-free gasoline (minimum of 77 octane) with a high quality 2 cycle engine oil at the ratio of 2.5 oz. oil to 1 gallon gasoline.
2. Mix fuel in a 1 or 2 gallon container approved for gasoline.
3. Loosen fuel cap slowly. Rest the cap on a clean surface.
4. Carefully pour fuel into the tank. Avoid spillage.
5. Immediately replace fuel cap and hand tighten. Wipe up any fuel spillage.



## STARTING AND STOPPING

### CAUTION

Do not hold throttle lever wide open while starting. Loss of control of auger could result.

### CAUTION

When priming, choke must be in the off position.

### TO START:

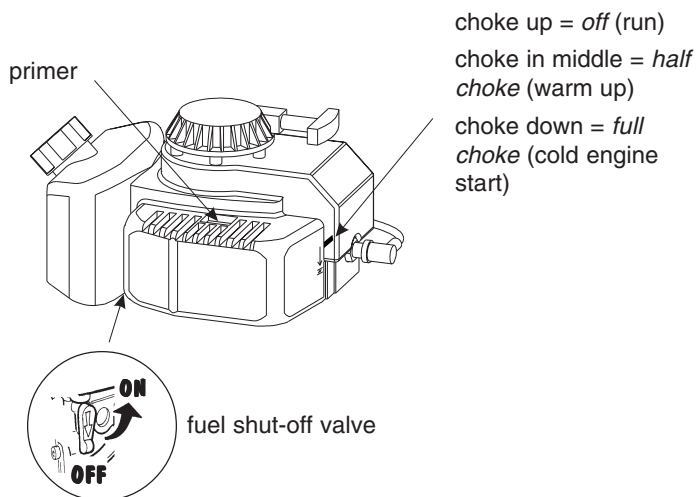
1. Open fuel shut-off valve located between gas tank and carburetor.
2. Be sure spark plug wire is attached to spark plug.
3. Flip the rocker switch to the **on** position.
4. Remove debris from air vent on fuel cap.
5. Priming:

**First start** - Starting new engine for first time, or after running out of gas, or after extended storage: Prime 8-10 times.

**Cold start** - Starting engine after it has been sitting or brief storage, and fuel is in the tank: Push top of primer 1 time for above 55°, 3 times below 55° with full choke.

6. Move red choke lever to **full** choke position if engine is cold.

**Warm start** - Starting engine after it has been stopped after running, but did not run out of fuel and has not cooled completely: **DO NOT USE PRIMER.**



7. Grasp starter handle and pull rope out slowly, until it pulls slightly harder. Then pull rope with a rapid full arm stroke. Let rope return to starter slowly.
8. Move choke lever to **half** choke position (midway between off and full).
9. Pull recoil starter until engine runs.
10. Run engine 30 to 45 seconds at full throttle on **half** choke position until engine warms up.
11. Move choke lever to **off** position.

### TO STOP:

1. Flip the rocker switch to the **off** position.
2. Close fuel shut-off valve.
3. Disconnect spark plug wire from spark plug and keep it away from spark plug.



## ⚠ CAUTION

### To prevent accidental starting:

Engine must be turned off and cool, and spark plug wire must be removed from spark plug before checking and adjusting engine or equipment.

## MAINTENANCE AND STORAGE SAFETY

1. Always allow muffler to cool before filling fuel tank.
2. When storing for over 1 month, use gas stabilizer in fuel.
3. Keep all screws, nuts, and bolts tight.
4. Close fuel shut-off valve located between gas tank and carburetor.
5. Do not fill gas tank indoors or when engine is running or is hot.
6. The gear case has 4 oz. of grease installed at the factory. It is recommended that once a year the gear case be split and the grease level checked. Add grease only if level of grease is below top of the gears. **DO NOT OVERFILL.**
7. For cold weather operation, store the unit in a cool environment. Transferring the unit from a warm to a cold place can cause the build up of harmful condensation.

## ICE POINT REPLACEMENT

## ⚠ CAUTION

**Auger blades and point are extremely sharp. Use caution when removing & replacing.**

1. Remove both blades.
2. Remove nut and retaining bolt from point.
3. Using a locking pliers, grasp point and pull out. If holder doesn't come out with the point, remove with pliers.
4. With locking pliers, push in new point and holder aligning bolt hole in point with holes in auger shaft. **DO NOT DAMAGE END OF POINT.**

**NOTE: When installing holder in auger shaft, edges of holder may shave off.**

5. Insert retaining bolt and tighten with nut.
6. Replace the blades and blade protector.

## ENGINE MAINTENANCE

### IMPORTANT

Engine can overheat and become damaged if debris blocks the cooling fins or recoil housing.

1. Check air cleaner.
2. Keep engine and parts clean. Check recoil housing area, linkage, springs and controls, muffler area, cooling fins, and spark plug.

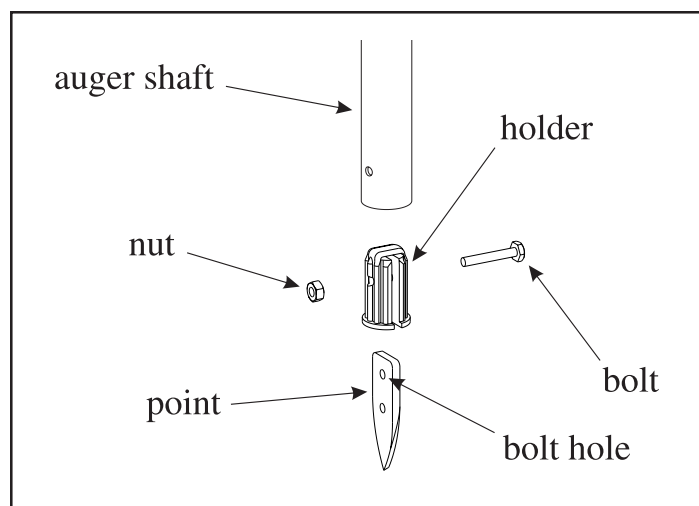
## STORAGE

## ⚠ CAUTION

**Do not store auger in an unventilated area where fuel fumes may reach flame, sparks, pilot lights or an ignited object. Drain fuel outdoors away from any ignition sources. Use only approved fuel containers.**

Follow the steps below to prepare your auger for storage.

1. Run with gas stabilizer in fuel. Screen in carburetor will glaze shut if gas stabilizer is not used before storage.
2. Drain the fuel tank. Run the engine until it stops.
3. Remove spark plug, pour one-half ounce of clean engine oil into cylinder. Pull starter handle slowly several times to distribute oil. Replace spark plug.
4. Clean entire auger.
5. Store your auger in a clean, dry building that is inaccessible to children.





# SERVICE, TROUBLESHOOTING AND REPAIR



## SERVICE INFORMATION



**IN CASE OF A SERVICE PROBLEM, DO NOT SEND UNIT BACK TO RETAILER. CONTACT ARDISAM, INC. AT 1-800-345-6007.**

*At Ardisam, we build quality and durability into the design of our products; but no amount of careful design by us, and careful maintenance by you, can guarantee a repair-free life for your auger. Most repairs will be minor, and easily fixed by following the suggestions in the troubleshooting guide in this section. The guide will help you pinpoint the causes of common problems and identify remedies.*

*For more complicated repairs, you may want to rely on your retailer or an authorized mechanic (contact your retailer for a list of authorized mechanics in your area). A parts catalog is included in this section.*

*We will always be glad to answer any questions you have, or help you find suitable assistance. To order parts or inquire about warranty, call or write us at the address found in the next column under the section ordering repair parts or check out our website - **[www.ardisam.com](http://www.ardisam.com)***

## ORDERING REPAIR PARTS

Parts can be obtained from the store where your auger was purchased or direct from the factory. To order from the factory, call or write to:



### ARDISAM, INC.

1360 1st Avenue; P.O. Box 666  
Cumberland, Wisconsin 54829  
(715) 822-2415 Fax (715) 822-4180

**1-800-3456-007**

[www.ardisam.com](http://www.ardisam.com)

Please include the following information with your order:

1. Part numbers
2. Part description
3. Quantity
4. Model number and serial number





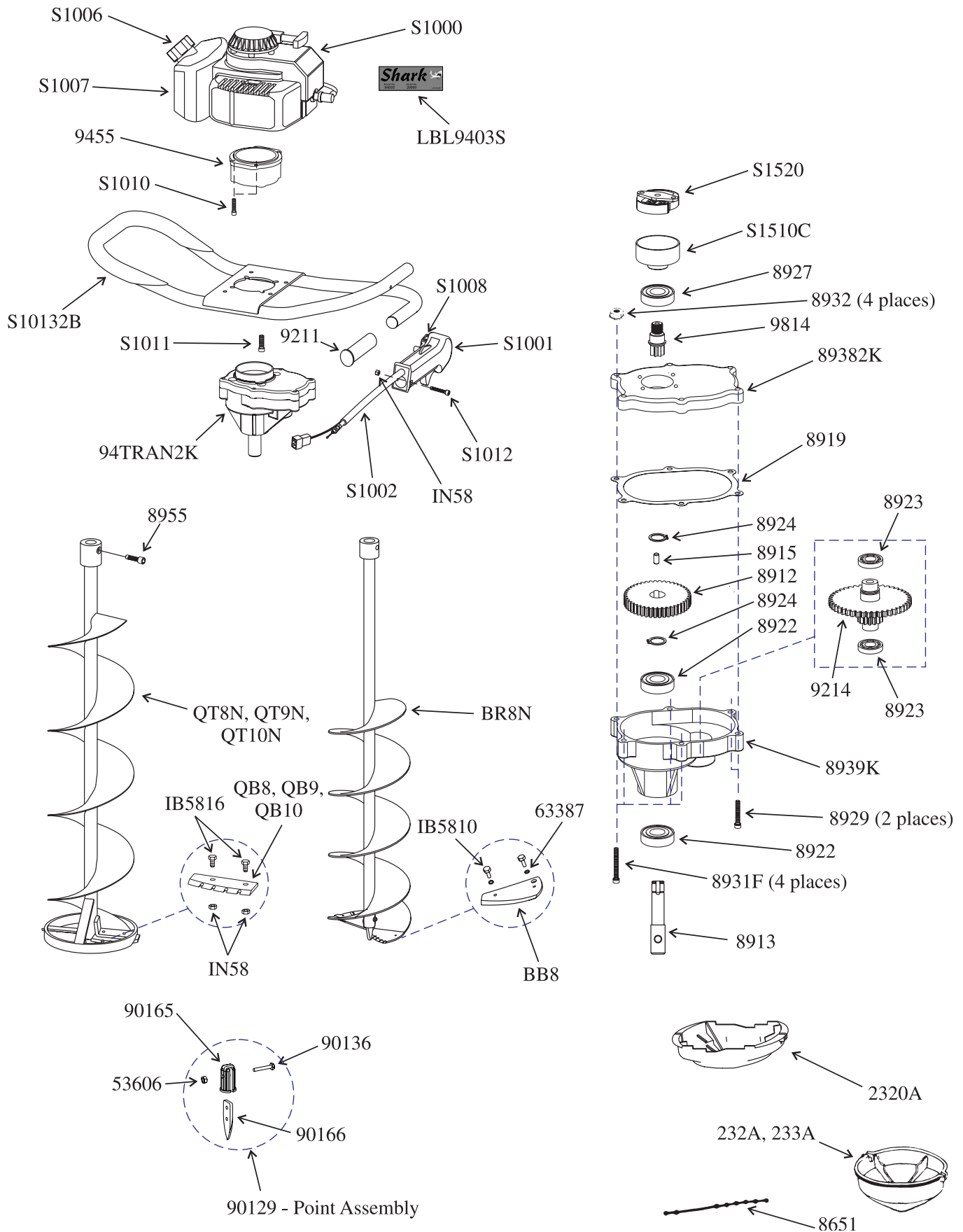
## TROUBLESHOOTING



### CAUTION

**Practice safety at all times. Engine must be turned off and allowed to cool, and spark plug wire must be disconnected before attempting any maintenance or repair.**

Problem	Possible cause	Remedy/Action
Engine will not start	<ol style="list-style-type: none"> <li>1. Power switch off</li> <li>2. Spark plug wire disconnected</li> <li>3. Fuel shut-off valve closed</li> <li>4. Choke in on position</li> </ol>	<ol style="list-style-type: none"> <li>1. Flip switch to on position</li> <li>2. Connect spark plug wire to spark plug</li> <li>3. Open fuel shut-off valve</li> <li>4. When priming, choke must be in the off position</li> </ol>
Engine runs rough, floods during operation	<ol style="list-style-type: none"> <li>1. Dirty air cleaner</li> <li>2. Choke partially engaged</li> <li>3. Carburetor out of adjustment</li> <li>4. Choke in on position</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean or replace air cleaner</li> <li>2. Turn off choke</li> <li>3. Call factory</li> <li>4. When priming, choke must be in the off position</li> </ol>
Engine is hard to start	<ol style="list-style-type: none"> <li>1. Stale fuel</li> <li>2. Spark plug wire loose</li> <li>3. Dirty carburetor</li> <li>4. Choke in on position</li> </ol>	<ol style="list-style-type: none"> <li>1. Drain old fuel and replace with fresh. Use gas stabilizer at end of season</li> <li>2. Make sure spark wire is securely attached to spark plug</li> <li>3. Clean carburetor, use gas stabilizer, new gas can</li> <li>4. When priming, choke must be in the off position</li> </ol>
Engine misses or lacks power	<ol style="list-style-type: none"> <li>1. Clogged fuel tank</li> <li>2. Clogged air cleaner</li> <li>3. Improper carburetor adjustment</li> <li>4. Spark plug dirty, improper gap, or wrong type</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove and clean</li> <li>2. Clean or replace</li> <li>3. Call factory</li> <li>4. Replace spark plug and adjust gap</li> </ol>
Auger turns at idle	<ol style="list-style-type: none"> <li>1. Idle speed too high</li> <li>2. Broken clutch spring</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust idle speed lower</li> <li>2. Replace both springs</li> </ol>
Auger turns, but has no power	<ol style="list-style-type: none"> <li>1. Choke on</li> <li>2. Carburetor out of adjustment</li> <li>3. Broken transmission</li> <li>4. Worn clutch shoes</li> <li>5. Worn engine lower seal</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn off choke after engine is running</li> <li>2. Call factory</li> <li>3. Call factory</li> <li>4. Replace clutch shoes and springs</li> <li>5. Call factory</li> </ol>
Auger jumps on ice	<ol style="list-style-type: none"> <li>1. Blades damaged or sharpened incorrectly</li> </ol>	<ol style="list-style-type: none"> <li>1. Buy new blades, or have blades sharpened at factory</li> </ol>
Auger cuts slowly	<ol style="list-style-type: none"> <li>1. Dull blades</li> <li>2. Damaged point</li> </ol>	<ol style="list-style-type: none"> <li>1. Buy new blades, or have blades sharpened at factory</li> <li>2. File point</li> </ol>
Engine runs, then quits	<ol style="list-style-type: none"> <li>1. Gas cap not venting</li> <li>2. Screen in carburetor plugged</li> <li>3. Fuel shut-off valve closed between gas tank and carburetor</li> </ol>	<ol style="list-style-type: none"> <li>1. Check self venting gas cap</li> <li>2. Clean screen, use gas stabilizer, clean gas can</li> <li>3. Open fuel shut-off valve</li> </ol>





# SHARK PARTS LIST MODEL 9403S



MINIMUM ORDER ..... \$10.00

Part #	Description	Qty.	Part #	Description	Qty.
232A	BLADE PROTECTOR, fits 6"-8" quantum auger	1	94TRAN2K	COMPLETE TRANSMISSION, black	1
2320A	BLADE PROTECTOR, fits 6"-8" turbo auger	1	BB8	ICE BLADE, 8" TurboCut	2
233A	BLADE PROTECTOR, fits 9" turbo & 10" quantum	1	BR8N	ICE AUGER, 8" Turbo, red	1
53606	NUT, #10, nyloc	1	IB5810	BOLT, 5mm x 0.8 x 10mm, (turbo ice blade to auger)	4
63387	LOCKWASHER, 5MM	4	IB5816	BOLT, 5mm x 0.8 x 16mm, (ice blade to auger)	4
8651	STRAP, Blade Protector	1	IN58	NUT, 5mm x 0.8 Nylock, (ice blade to auger)	5
8912	44T GEAR	1	LBL9403S	DECAL, Shark, serialized	1
8913	OUTPUT SHAFT, 7/8"	1	LBLBPE	DECAL, Blade Protector, Eskimo	1
8915	DOWEL PIN, 1/4" x 1/2", hardened steel	1	LBLESKS	DECAL, Eskimo oval, auger stem & handlebar plate	2
8919	GASKET	1	LBLSHARK	DECAL, Shark logo	1
8922	BALL BEARING	2	QB8	ICE BLADE, 8" quantum, set of two	1
8923	BALL BEARING	2	QB9	ICE BLADE, 9" quantum, set of two	1
8924	SNAP RING	2	QB10	ICE BLADE, 10" quantum, set of two	1
8927	BALL BEARING, Hi-Speed	1	QT8N	ICE AUGER, 8" red	1
8929	BOLT-SHCS, 1/4-20 x 1-1/2"	2	QT9N	ICE AUGER, 9" red	1
	(gear case bottom to gear case top)		QT10N	ICE AUGER, 10" red	1
8931F	BOLT-SHCS, 1/4-20 x 2"	4	S1000	GAS ENGINE, 2.5-hp Emak	1
	(gear case to handlebar plate)		S1001	THROTTLE CONTROL	1
8932	NUT-Hex, 1/4-20 Keps	4	S1002	WIRING HARNESS	1
89382K	GEAR CASE TOP, black	1	S1006	GAS CAP	1
8939K	GEAR CASE BOTTOM, black	1	S1007	GAS TANK	1
8955	AUGER BOLT-SHCS, 3/8-16 x 1-1/4"	1	S1008	ROCKER SWITCH	1
	(auger to powerhead)		S1010	BOLT-SHCS, 5mm x 0.8 x 20mm	4
9211	HANDLE GRIP	1	S1011	BOLT-SHCS, 1/4-20 x 3/4"	4
9214	48T GEAR & 10T PINION GEAR ASSY, one piece unit	1		(handlebar plate to engine)	
9455	ADAPTER RING	1	S1012	BOLT-SHCS, 5mm x 0.8 x 30mm	1
	(engine to handlebar plate)		S10132B	HANDLEBAR, black	1
9814	GEAR, pinion 7 tooth threaded	1	S1510C	CLUTCH DRUM, threaded for Emak	1
90129	POINT REPLACEMENT ASSY.	1	S1520	CENTRIFUGAL CLUTCH ROTOR	1
90136	BOLT, #10-24 x 1-1/4" stainless	1		(Includes springs & shoes)	
90165	HOLDER, Point	1			
90166	POINT	1			

## Accessories

EXT6	DEPTH EXTENSION, 6"
EXT12	DEPTH EXTENSION, 12"
EXT18	DEPTH EXTENSION, 18"



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